generation, the most transparent absurdities, as for example, the idea that night air is harmful to the sick; but when the truth is made plain to them, they are found ready to adopt it, and they will transmit that as faithfully as they did the falsehoods. But the medical profession has been extremely lethargic in this matter, and needs, itself, to be aroused to its duties and opportunities.

INTRAABDOMINAL SHORTENING OF THE ROUND LIGAMENTS FOR RETRODISPLACED UTERI.*

By J. HENRY BARBAT, Ph. G., M. D., San Francisco.

Instructor in Abdominal Surgery, Medical Department, University of California.

RETRODISPLACEMENTS of the uterus have from the beginning of gynecic practice been a *bete noir* to the gynecologist. All manner of mechanical appliances have been invented to replace and retain the retroverted or retroflexed uterus. Numerous operations have been devised for the same purpose, and yet up to recently, few men have felt that any of the various methods were satisfactory, except in a small number of cases, in which some one of the various methods is applicable, or even indicated; but none of the older methods could restore the uterus to its normal position and at the same time retain its normal physiological condition.

Pessaries undoubtedly still have their place in the gynecologist's armamentarium, and should be used in cases in which the normal-sized uterus is retroverted, but easily replaced manually, and the patient unable to take treatment or be operated on, and unmarried. If the patient can take treatment for a sufficient length of time, some of these cases may be cured by massage, electricity and tampons. It usually requires from four to six months before any case can be considered cured by this method, and the patient is obliged to come to the office every day at first, and the treatment continued for at least six weeks after the pelvic organs are in apparently perfect condition.

The first operative procedure for the relief of retrodisplacements was ventro-fixation, which was done by Koeberle in 1869, and subsequently by Sims, in 1875. This operation has been modified in numerous minor ways, by varying the position of the sutures in the uterus and abdominal wall, and by using all manner of suture material. The operation, no matter how performed, is unphysiologic, and should only be made use of in cases of prolapsed uteri, in which cases, after having narrowed the vagina, it affords the best and surest means of retaining the prolapsed uterus.

The next operation which was suggested, was the shortening of the round ligaments by drawing them through the external abdominal rings. It was first executed on the living subject by Alexander, in 1881. This was also modified in every conceivable manner.

The operation is a good one in many cases, but has never appealed to me as a good surgical procedure, as the operator is obliged to work in the dark, and in case adhesions exist, it would probably result in failure. Duhrssen's method of vaginal fixation is only applicable in a few cases, and has been followed by fatal results in several cases in which pregnancy had occurred subsequent to operation.

In the majority of cases of retrodisplacement which require operation, it is also necessary, or at least advantageous, to examine the pelvic contents, with a view of determining the existence of adhesions, and rectifying any pathological condition of the adnexa. Wylie, Baer and Dudley each devised a method by intraabdominal folding of the round ligaments; the folds being held in position by several sutures. A large proportion of failures resulted, and the operation fell into disrepute. Webster drew the round ligaments through a hole in the broad ligament and sutured them on the back of the uterus.

The latest method is one devised by Baldy, and is a modification of Webster's; it consists in cutting off the round ligaments at their junction with the uterus, and drawing them through holes in the broad ligaments and suturing them on the posterior surface of the uterus. I have performed the operation in a number of cases, and so far, have been well pleased with the results, all of which have been successful, which is more than can be said of any of the other operations.

The technic which I have employed has varied slightly, according to the pathologic lesions present. The following cases will give an idea of the method:

Mrs. H., aged twenty-four years, had been having pain in the back and lower abdomen ever since the birth of her child, two years before. At the time I saw her she was just recovering from an acute exacerbation and had considerable tenderness over the right ovary and appendix, with the uterus retroflexed and adherent. On opening the abdomen the uterus was found bound down on the right side by an inflammatory mass, consisting of the tube and ovary, with the inflamed appendix firmly adherent. This was first separated and removed, and then the mass, consisting of tube and ovary, eneucleated. During the eneucleation, several cavities were encountered, which contained sterile pus; they were mopped out with formalin solution 1-1000. The uterus, after being liberated, still remained retroflexed, and I decided to shorten the round ligaments. A catgut ligature was first tied around the ligaments, close up to the uterus, and they were cut off on the distal side of the ligature. On the left side the cut end of the round ligament was drawn through the broad ligament, just below the tube, by means of a narrow Kocher forceps. On the right side, the tube and ovary having been removed, there was not enough broad ligament left to pass the ligament through, so it was passed around to the back of the uterus.

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The round ligaments were so long, that when the uterus was in position, they met behind it, and were held in position with fine catgut sutures. Before placing the sutures, I made a cut through the peritoneum from one side of the uterus to the other, just under the place the round ligaments lay. This brought the raw surface of the ligament in contact with the muscular surface of the uterus. The sutures were placed beginning at the lower border of the ligament, just below the uterine cornua, the suture including a small part of the wall of the uterus and half the thickness of the ligament. Sutures were placed one-third of an inch apart, and on the upper border were placed so as to alternate with the lower ones, so as not to cause necrosis of the ligament. One suture held the ends of the ligaments together. When completed, the ligaments appeared imbedded in the uterine wall, and held the uterus in perfect position. At this writing, eight months since the operation, the uterus is slightly anteverted and freely movable; no pain or tenderness.

The next case was about the same, except that the right ovary was not involved, but the tube was, the operation being in other respects the same. Result after seven months, perfect.

Mrs. K.—Uterus had been bound down by inflammatory exudate, following a septic abortion, and the patient had been bedridden for two months. Uterus retroflexed and immovable. At the operation, the adhesions which involved the posterior wall of the uterus, near the fundus, were separated and the uterus raised. In this case no incision was necessary in the posterior wall of the uterus, because the loosening of the adhesions left sufficient raw surface for the adhesion of the ligaments, which were spread out as much as possible.

This patient experienced immediate relief, and was able to attend to her house work at the end of four weeks.

Miss B.—Nurse, severe headache, tender coccyx and appendix. Uterus retroverted, but not adherent. Appendix removed first, and then typical operation on round ligaments, except that they were not long enough to meet on the posterior wall of the uterus; I therefore did not continue the incision across, but only the length of the ligaments. Patient was back nursing five weeks from date of operation, free from backache.

My fifth case was similar to the last, except that the right kidney, which was movable, was sutured at the same time.

Mrs. I. had a pelvic peritonitis four years ago, following a badly treated miscarriage, which left a large mass in the left broad ligament. This was reduced by means of massage, electricity and tampons, and patient was apparently well. Three years after she came to me for pain in the back and left inguinal region, which had been getting worse for three months. I found the uterus retroflexed, and the left ovary enlarged and tender. I advised operation, but patient demurred and preferred to try treatments. She came to my office faithfully for four months, and I succeeded in loosening the uterus a little, but was never able to replace it properly. One day, after treatment, she had a severe exacerbation of pain in the left side, and her temperature went up to 104° F. This decided her in favor of operation, which was done one week after. The uterus was held in retroflexion by bands of adhesion running from the left side of the posterior wall to the cul de sack; and the left ovary, which was about two and one-half inches in diameter, and cystic, was firmly adherent to the posterior surface of the broad ligament. Nothing in the pathology offered a satisfactory explanation for the rise of temperature. The ovary was lifted out and resected, and the bands of adhesions cut close to the uterus. The round ligaments were then transplanted, and held the uterus in perfect position. An examination made three months after, showed the pelvic organs in apparently perfectly normal condition.

The remaining cases are too recent to determine the result. The only objection which can be urged against the operation is that the weakest end of the round ligament is utilized to sustain the weight of the uterus, but this objection is more theoretical than real, because the uterus is not supposed to be dragging on the round ligaments when it is in normal position, and it is only when it has reached the first degree of retroversion that the round ligaments are being dragged on.

As long as the uterus maintains its normal position of anteversion, the pressure of the abdominal contents prevents any pulling on the round ligaments, but if the axis of the uterus, instead of pointing anterior to the perpendicular, points posteriorly, then the weight of the abdominal contents tends to force it backwards, and in conjunction with its own weight, pulls on the round ligaments and stretches them.

Any operation which will hold the uterus in anteversion for a sufficient time to allow the round ligaments to regain their tone, will cure the retrodisplacement, if the original cause of the trouble be remedied. Theoretically, Alexander's operation appears to restore the parts in the most physiologic manner, but practically, its limitations are so great, that it is only useful in a few selected cases, while Baldy's method may be applied to practically all cases, and permits the operator to remedy any pathologic condition which may be present in the pelvis at the time of operation. The results are all that could be desired.

Race Degeneracy and Dental Irregularities—Dr. E. S. Talbot in *Alienist and Neurologist:* "Irregularities of the jaws and teeth increase proportionately westward from Greece to the British Isles, the rate in the British Isles being greatest. Greece, however, no longer contains the race which so long dominated the world intellectually. The people are a mixed Slavo-Mongoloid race who speak Greek. Furthermore, as the correctional, charitable and hospital arrangements are primitive, the defective classes are not accumulated. Under such conditions a seeming decrease in stigmata of degeneracy must result. This, however, would extend more to deeper stigmata than to those of the jaws and teeth. Degenerate jaws and teeth are commonest, next to the English speaking people, among the Scandinavian speaking. As both have passed through very similar phases of race evolution, and both contain at bottom the same race elements, this was to have been expected. The struggle for existence between the organs, dependent on race evolution and race admixture, has resulted in the higher races in the triumph of the brain and skull at the expense of the face; hence, the higher the intellectuality the greater the tendency to local degeneracy of the face, jaws and teeth."